

REMARKS

Summary of Office Action

Claims 1-8, 13-21, 23-25, 27, and 53-74 are pending in this application.

The Examiner withdrew the indicated allowability of claims 23-25, 27, 53-68, and 72-74 in view of a different interpretation of previously cited prior art reference Shapiro et al. U.S. Patent No. 6,436,139 (hereinafter "Shapiro").

The Examiner rejected claims 1, 2, 5, 6, 15-21, 23-25, 53, 54, 56, 58, 63-69, and 72 under 35 U.S.C. § 102(e) as being anticipated by Shapiro and rejected claims 3, 4, 7, 8, 13, 14, 27, 55, 57, 59-62, 70, 71, 73, and 74 under 35 U.S.C. § 103(a) as being obvious from Shapiro.

Summary of Applicants' Reply

Applicants have amended independent claims 1, 23, 53, 69, and 72 to make more clear the structural relationships between the elements. Dependent claims 3, 55, 60, and 64 were amended to conform to their respective independent claims.

No new matter has been added.

Reconsideration of this application in view of the amendments and following remarks is respectfully requested.

Rejections of Claims Under 35 U.S.C. § 102(e)

Independent claims 1, 23, 53, 69, and 72 and dependent claims 2, 5, 6, 15-21, 24, 25, 54, 56, 58, and 63-68 were rejected under 35 U.S.C. § 102(e) as being anticipated by Shapiro.

These rejections are respectfully traversed.

Shapiro does not anticipate applicants' invention as claimed.

Amended independent claims 1 and 69 each require the single channel to extend across an open end of the body portion. Shapiro's thread cutouts 14 and 20 (*see* Shapiro's FIGS. 1-3), which the Examiner equated to applicants' channel, do not extend across an open end of Shapiro's interbody fusion device 10. Furthermore, thread cutouts 514 and 520 (*see* Shapiro FIG. 12), which the Examiner also equated to applicants' channel, also do not extend across an open end of Shapiro's fusion device 510.

Amended claims 1 and 69 also require the channel to have different depths as measured from opposite sides of the trough (*see* applicants' FIG. 1C, noting face depths F1 and F2). Shapiro plainly has no such channel on either its first or second end 34 or 36, respectively. In particular, Shapiro's FIGS. 1, 2, 4A, 4B, and 4C show no channel extending across second end 36 and a symmetrically-shaped tool driving slot 16 extending across first end 34. Slot 16 does not have different first and second depths (as best seen in FIG. 4B). Moreover, concave sidewall 24, even if arguably considered to be a channel extending across an arguably open end (window 38), is also symmetrically shaped and does not have different first and second depths (as best seen in FIG. 5A).

Accordingly, independent claims 1 and 69 are not anticipated by Shapiro.

Amended independent claims 23, 53, and 72 each require first and second ends to be orthogonal to the longitudinal axis (*see, e.g.*, first end 6A, second end 6B, and longitudinal axis CL in applicants' FIGS. 1A and 1C). These claims also require at least one end to have a cutout comprising a centerline running parallel to the longitudinal axis (*see, e.g.*, centerline 1a in FIG. 1C).

Shapiro's thread cutouts 514 and 520 (*see* Shapiro FIG. 12), which the Examiner equated to applicants' cutout, "are formed along line 570, which runs substantially parallel to ... longitudinal axis 19" (Shapiro column 8, lines 20-22). Thus, line 570 extends along a side of fusion device 510 that is parallel, not orthogonal, to longitudinal axis 19. Therefore, that side of device 510 does not meet the claimed limitation of applicants' first or second ends, which are required to be orthogonal to the longitudinal axis and, accordingly, thread cutouts 514 and 520 do not meet the claimed limitations of applicants' cutout.

Independent claims 23, 53, and 72 are thus not anticipated by Shapiro.

For at least the above reasons, dependent claims 2, 5, 6, 15-21, 24, 25, 54, 56, 58, and 63-68 should also not be anticipated by Shapiro (i.e., dependent claims are patentable if their independent claim is patentable).

Accordingly, applicants respectfully request that the rejections of claims 1, 2, 5, 6, 15-21, 23-25, 53, 54, 56, 58, 63-69, and 72 under 35 U.S.C. § 102(e) be withdrawn.

Rejections of Claims Under 35 U.S.C. § 103(a)

Dependent claims 3, 4, 7, 8, 13, 14, 27, 55, 57, 59-62, 70, 71, 73, and 74 were rejected under 35 U.S.C. § 103(a) as being obvious from Shapiro.

These rejections are respectfully traversed.

For at least the reasons discussed above with respect to amended independent claims 1, 23, 53, 69, and 72, dependent claims 3, 4, 7, 8, 13, 14, 27, 55, 57, 59-62, 70, 71, 73, and 74 should no longer be obvious from Shapiro (i.e., dependent claims are patentable if their independent claim is patentable).

Accordingly, applicants respectfully request that the rejections of claims 3, 4, 7, 8, 13, 14, 27, 55, 57, 59-62, 70, 71, 73, and 74 under 35 U.S.C. § 103(a) be withdrawn.

Conclusion

The foregoing demonstrates that claims 1-8, 13-21, 23-25, 27, and 53-74 are allowable. This application is therefore in condition for allowance. Reconsideration and allowance are accordingly respectfully requested.

Respectfully submitted,



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